WHAT IS CLAIMED IS:

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- 1. An image processing system comprising:
- an image data transmission terminal;
- 5 an image formation apparatus;
 - a filtering section for performing filtering for image data;
 - a coding section for performing reversible coding processing for the image data subjected to the filtering by the filtering section; and
 - a decompression section for performing decompression processing for the image data subjected to the coding processing by the coding section, wherein
- the filtering of the filtering section changes the pixel
 value of image data so as to be fitted for the coding processing
 of the coding section.
 - 2. An image processing system comprising:
 - an image data transmission terminal; and
- an image formation apparatus, wherein
 - the image data transmission terminal includes:
 - a filtering section for performing filtering for image data;
- a coding section for performing reversible coding
- 25 processing for the image data subjected to the filtering by

the filtering section; and

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a transmission section for transmitting the image data subjected to the coding processing by the coding section to the image formation apparatus, and wherein

5 the image formation apparatus includes:

a reception section for receiving the image data from the image data transmission terminal; and

a decompression section for performing decompression processing for the image data received by the reception section, and wherein

the filtering of the filtering section changes the pixel value of image data so as to be fitted for the coding processing of the coding section.

3. An image processing system comprising: an image data transmission terminal; and an image formation apparatus, wherein the image data transmission terminal includes:

a filtering section for performing filtering for 20 image data; and

a transmission section for transmitting the image data subjected to the filtering by the filtering section to the image formation apparatus, and wherein

the image formation apparatus includes:

a reception section for receiving the image data

from the image data transmission terminal;

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a coding section for performing reversible coding processing for the image data received by the reception section; and

a decompression section for performing decompression processing for the image data subjected to the coding processing by the coding section, and wherein

the filtering of the filtering section changes the pixel value of image data so as to be fitted for the coding processing of the coding section.

4. The image processing system according to claim 1, wherein

the filtering section performs filtering corresponding to an algorithm of the coding processing of the coding section.

5. The image processing system according to claim 4, further comprising:

an edit section for performing edit processing for the image data decompressed by the decompression section;

a re-coding section for performing coding processing for the image data subjected to the edit processing;

a re-decompression section for performing decompression processing for the image data subjected to the coding processing by the re-coding section; and

an image formation section for forming an image based on the image data decompressed by the re-decompression section.

6. The image processing system according to claim 1,5 wherein

to perform coding processing for an attention pixel unit in the image data, the coding section references the pixel value of a pixel unit at a preset position and performs coding processing.

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7. The image processing system according to claim 6, wherein

as the filtering, the filtering section changes the pixel value of the attention pixel unit so as to raise the probability that the pixel value of the attention pixel unit will match the pixel value of the pixel unit at the preset position.

- 8. The image processing system according to claim 1, wherein
- the filtering section changes the pixel value of the attention pixel unit in response to the spatial frequency of the image data.
- The image processing system according to claim 1,
 wherein

as the filtering, the filtering section changes the pixel value of the attention pixel unit in the image data so as to decrease the code amount of coding of the coding section and distributes the change amount produced by changing the pixel value to peripheral pixels, and wherein

the coding section codes the pixel value changed by the filtering.

10. The image processing system according to claim 1,
10 further comprising:

a parameter generation section for generating a filter parameter in response to a specified compression ratio, wherein

the filtering section performs the filtering in response to the generated filter parameter.

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11. The image processing system according to claim
10, wherein

the parameter generation section generates the filter parameter in response to the speed at which data can be transferred to the image formation apparatus or the operation state of the image formation apparatus.

- 12. The image processing system according to claim 2, wherein
- 25 the image formation apparatus further includes a

re-filtering section for performing the filtering for the image data subjected to the edit processing by the edit section in response to the type of edit processing or the operation state of the image formation apparatus.

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- 13. An image formation apparatus comprising:
- a reception section for receiving image data subjected to filtering;
- a coding section for performing reversible coding processing for the image data received by the reception section;
- a decompression section for performing decompression processing for the image data subjected to the coding processing by the coding section;
- an edit section for performing edit processing for the decompressed image data;
 - a re-coding section for performing reversible coding processing for the image data subjected to the edit processing;
 - a re-decompression section for performing decompression processing for the image data subjected to the coding processing by the re-coding section; and
 - an image formation section for forming an image based on the image data decompressed by the re-decompression section.
 - 14. An image formation apparatus comprising:
- a reception section for receiving image data subjected

to filtering and reversible coding processing;

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a decompression section for performing decompression processing for the image data received by the reception section;

an edit section for performing edit processing for the decompressed image data;

a re-coding section for performing reversible coding processing for the image data subjected to the edit processing;

a re-decompression section for performing decompression processing for the image data subjected to the coding processing by the re-coding section; and

an image formation section for forming an image based on the image data decompressed by the re-decompression section.

- 15. An image formation apparatus comprising:
- an filtering section for performing filtering for image data;
 - a coding section for performing reversible coding processing for the image data subjected to the filtering by the filtering section;
- a decompression section for performing decompression processing for the image data subjected to the coding processing by the coding section;

an edit section for performing edit processing for the decompressed image data;

a re-coding section for performing reversible coding

processing for the image data subjected to the edit processing;

a re-decompression section for performing decompression

processing for the image data subjected to the coding processing

by the re-coding section; and

an image formation section for forming an image based on the image data decompressed by the re-decompression section.

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16. An image processing method for repeating coding processing and decompression processing of image data, the method comprising:

performing filtering of changing the pixel value so as to fit for reversible coding processing for image data;

performing reversible coding processing for the image data subjected to the filtering; and

performing decompression processing for the image data subjected to the coding processing.

17. A program executable by a computer for an image processing system including an image data transmission terminal having the computer, and an image formation apparatus, the program comprising:

performing filtering of changing the pixel value so as to fit for reversible coding processing for image data; and transmitting the image data subjected to the filtering to the image formation apparatus.

18. A program executable by a computer for an image processing system including an image data transmission terminal having the computer, and an image formation apparatus, the program comprising:

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performing filtering of changing the pixel value so as to fit for reversible coding processing for image data;

performing reversible coding processing for the image data subjected to the filtering; and

transmitting the image data subjected to the coding processing to the image formation apparatus.